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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/615,613	07/14/2000	Jeong-Ho Cha	992093	4625

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EXAMINER
ZHONG, CHAD

ART UNIT	PAPER NUMBER
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2154

DATE MAILED: 08/19/2003

4

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	09/615,613		CHA, JEONG-HO	
	Examiner		Art Unit	
	Chad Zhong		2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 July 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
- 12) ☒ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 a) ☒ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ | 6) <input type="checkbox"/> Other: _____ |

Detailed Action

1. Claims 1-11 are presented for examination.
2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention of which the claims are directed. The current title is imprecise.
3. It is noted that although the present application does contain line numbers in specification and claims, the line numbers in the claims do not correspond to the preferred format. The preferred format is to number each line of every claim, with each claim beginning with line 1. For ease of reference by both the Examiner and Applicant all future correspondence should include the recommended line numbering.
4. The drawings is objected to because figures 1 and 2 should be designated by a legend such as --Prior Art-- only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
5. The request for new name change has been acknowledged and the name change has been incorporated in this application, see attached bibsheet. [i.e. Cho changed to Cha]. However, the new filing receipt will not be mailed.

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6. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because the name of Jeong-Ho CHO was used instead of

Jeong-Ho CHA (as indicated in applicant's request for new filing receipt filed on 12/14/00).

Specification

7. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract of the disclosure is too long. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 112

8. Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. The following terms lack proper antecedent basis:

- i. the remainder nodes – claims 7 and 9.
- b. The claim language in the following claims is murky or not clearly understood:
 - i. as per claim 1, lines 13-14, it is not clearly indicated whether the control signal transmitted from NMS to the “next predetermined node” bypass or went through the “predetermined node” (i.e. is the control signal is connected directly to “next predetermined node”?).
 - ii. as per claim 4, lines 9-10, it is not clearly indicated whether the control signal transmitted from NMS to the “second node” bypass or went through the “first node” (i.e. is the control signal connected directly to the “second node”?).
 - iii. as per claim 6, lines 6-7, it is not clearly indicated whether the control signal transmitted from NMS to the “remainder node” bypass or went through the “second node” (i.e. is the control signal connected directly to the remainder node.?)
 - iv. as per claim 8, lines 10-11, it is not clearly indicated whether the control signal transmitted from NMS to the “other node” by pass or went through the “one node” (i.e. is the control signal connected directly to the “other node”?)

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's prior art (hereinafter AAPA) in view of Chow, et al. (hereinafter Chow) US 6,029,175.

11. As per claims 1,4, and 8, AAPA teaches the invention substantially as claimed including a NMS (Network Management System) and a network having at least two (2) nodes to transmit new program data and corresponding control signal to any destination node. Additionally, old programs on the network elements (NE) are replaced by newly transmitted programs using control signals (see specification pages 3-5 and figures 1-2).

12. AAPA did not explicitly teach a memory in each node for storing of new program data within a node. However it would have been obvious to one of ordinary skill in this art at the time of invention to include memory in each node for storing the received data because doing so would improve the integrity of AAPA's system by storing the received data and forwarding the data when needed.

13. AAPA did not specifically teach that NMS will inform the node who has the updated data to transfer the stored data to the next predetermined node.

14. Chow teaches a method of updating software to multiple computers [see column 59 lines 31-34 and column 60 lines 46-50] where second node who has the updated data to update data in the third node [col. 56, lines 34-36].

15. It would have been obvious to one of ordinary skill in this art at the time of invention was made to combine the teaching of AAPA and Chow because they both dealing with updating program in the system. Furthermore, the teaching of Chow to allow one of the node having the updated data to forward the data to other nodes would improve the latency and communication costs for AAPA's system by shortening the travel time of program data in between nodes.

16. As per claims 2, 6, and 10, Chow discloses updating the program of third node using the second node's updated program [col. 56, lines 33-37].

17. As per claims 3, 5, and 11, AAPA teaches a linear configuration for a network [specification page 2, lines 12-13].

18. As per claims 7 and 9, Chow teaches the step of repeating the updated data to the remainder of the nodes in the system [col. 59, lines 31-34 and col. 60 lines 46-50].

19. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over ODA et al., JP 07-295943 (hereinafter ODA) in view of AAPA.

20. As per claims 1,4, and 8, ODA teaches the invention substantially as claimed including

a NMS (Network Management System) and a network having at least two (2) nodes to transmit new program data to any destination node [page 4, paragraph (0016) lines 2-4]. Additionally, allocating memory within the predetermined node in response to new program data, storing received new program data in the allocated region and replace the program of the node with new data [page 6, paragraph (0034) lines 9-10]. Finally allowing the predetermined node to transmit the stored new program data to the next predetermined node [page 7, paragraph (0037) lines 1-4 and page 6, paragraph (0035) lines 8-11].

21. ODA did not teach of control signals for controlling updates and transmission of data for a slave node.

22. AAPA discloses of control signals for controlling updates, and control signals for indication of transmission of data to the next predetermined node. [figures 1-2 and specification pages 3-5]

23. It would have been obvious to one of ordinary skill in this art at the time of invention was made to combine the teaching of ODA and AAPA because they both dealing with updating program in the system. Furthermore, the teaching of AAPA to allow control signals communicating between nodes would improve ODA's system where central node gaining greater control in terms of the timing and efficiency of program data's arrival without having to increase the latency in between nodes.

24. As per claim 2, 6, and 10, AAPA discloses utilization of control signals to control replacement of program [figures 1-2 and specification pages 3-5].

27. As per claims 3, 5, and 11, AAPA teaches a linear configuration for a network [specification page 2, lines 12-13].

28. As per claims 7 and 9, ODA teaches the step of repeating the updated data to the remainder of the nodes in the system [page 7, paragraph (0037) lines 1-4].

Conclusion

29. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents and publications are cited to further show the state of the art with respect to changing program of remote nodes.

- i. US 5701491 to Dunn et al.
- ii. US 6360264 to Rom.
- iii. US 5585854 to Makino.
- iv. JP 07-168771 to KAWANAKA, KIYOSHI.
- v. JP 06-085939 to DOI YUJI et al.
- vi. JP 11-184702 to OTOMOTO.
- vii. JP 2000-067021 to TAKI.
- viii. JP 05-158703 to TANABE.
- viii. Communications, 1991. ICC 91, Conference Record. IEEE International Conference on , 23-26 June 1991 LYNDON et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chad Zhong whose telephone number is (703)305-0718.

The examiner can normally be reached on M-F 7:15 to 4:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng An can be reached on (703)305-9678. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-3900.

CZ

August 14, 2003



MENG-AL T. AN
SUPERVISORY PATENT EXAMINER
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